CPC COOPERATIVE PATENT CLASSIFICATION

B26F PERFORATING

PUNCHING CUTTING-OUT STAMPING-OUT

SEVERING BY MEANS OTHER THAN CUTTING (marking-out, perforating or making buttonholes A41H 25/00; shoemaking A43D; surgery A61B; punching metal B21D; drilling metal B23B; cutting of metal by applying heat locally, e.g. flame cutting, B23K; cutting by abrasive fluid jets B24C 5/02; details common to machines for severing B26D; drilling wood B27C; drilling stone B28D; working of plastics or substances in a plastic state <u>B29</u>; making boxes, cartons, envelopes or bags, of paper or similarly worked materials, e.g. metal foil, B31B; of glass C03B; of leather C14B; of textile materials D06H; for light guides G02B 6/25; of tickets G07B)

NOTE

This subclass covers:

perforating, punching, cutting-out, stamping-out;

severing, by means other than cutting, non-metallic sheet materials or metal foil in general;

severing, by means other than cutting, other forms of non-metallic material not otherwise provided for.

Attention is drawn to Notes (1) and (2) following the title of subclass B26D.

Guide heading:

B26F 1/00 Perforating

Punching Cutting-out Stamping-out

Apparatus therefor (subbjecting the grinding tools or the abrading medium to vibration, e.g. grinding with ultrasonic frequency <u>B24B 1/04</u>, perforating by sand-blasting <u>B24C</u>; {e.g. abrasive blasting used for cutting B24C 1/045 }; punching cards or tapes for statistical and record purposes G06K 1/00)

B26F 1/0007	. {Perforation of photographic films }
B26F 1/0015	{specially adapted for perforating tubes }
B26F 1/0023	{by rotary tools, e.g. saws (B26F 1/0076 takes pre

ecedence) }

B26F 1/003 {of the drill type }

B26F 1/0038 {from the inside (B26F 1/0053 takes precedence) }

{by tools that follow a closed path around the tube (B26F 1/0053 takes B26F 1/0046 precedence) }

B26F 1/0053 {by machining, e.g. cutting, grinding, projections on the tube wall }

B26F 1/0061	{whereby the tube moves axially or radially (<u>B26F 1/0038</u> , <u>B26F 1/0046</u> , <u>B26F 1/0053</u> take precedence) }
B26F 1/0069	{and the tool travels with the tube }
B26F 1/0076	{and the tool rotates }
B26F 1/0084	. {specially adapted for perforating rubber }
B26F 1/0092	• {Perforating means specially adapted for printing machines (<u>B26F 1/02</u> to <u>B26F 1/46</u> take precedence) }
B26F 1/02	. Perforating by punching, e.g. with relatively-reciprocating punch and bed
B26F 1/04	with selectively-operable punches
B26F 1/06	with punching tools moving with the work
B26F 1/08	wherein the tools are carried by, and in operation move relative to, a rotative drum or similar support
B26F 1/10	Roller type punches
B26F 1/12	to notch margins of work
B26F 1/14	Punching tools Punching dies
B26F 1/16	. Perforating by tool or tools of the drill type
B26F 1/165	{by flow drilling (for metal B21C 37/292) }
B26F 1/18	. Perforating by slitting, i.e. forming cuts closed at their ends without removal of material
B26F 1/20	with tools carried by a rotating drum or similar support (<u>B26F 1/22</u> takes precedence)
B26F 1/22	to form non-rectilinear cuts, e.g. for tabs
B26F 1/24	. Perforating by needles or pins
B26F 1/26	. Perforating by non-mechanical means, e.g. by fluid jet
B26F 1/28	by electrical discharges
B26F 1/31	by radiation (by laser beam <u>B23K 26/00</u>)
B26F 1/32	Hand-held perforating or punching apparatus, e.g. awls
B26F 1/34	power actuated (details or components, e.g. casings, bodies, of portable power-driven tools not particularly related to the operation performed <u>B25F 5/00</u>)
B26F 1/36	Punching or perforating pliers
B26F 1/38	. Cutting-out Stamping-out
B26F 1/3806	{wherein relative movements of tool head and work during cutting have a component tangential to the work surface (<u>B26F 1/40</u> takes precedence) }
B26F 1/3813	{wherein the tool head is moved in a plane parallel to the work in a coordinate system fixed with respect to the work } [9809]
B26F 1/382	{ wherein the cutting member reciprocates in, or substantially in, a direction parallel to the cutting edge }
B26F 1/3826	{using a rotary circular cutting member }

D00E 4/0000	(coing an anallage based builty and be like)
B26F 1/3833	{using an endless band-knife or the like }
B26F 1/384	{using rotating drums }
B26F 1/3846	{cutting out discs or the like (<u>B26F 1/384</u> , <u>B26F 1/40</u> and <u>B26F 1/44</u> take precedence) }
B26F 1/3853	{cutting out frames (<u>B26F 1/384</u> , <u>B26F 1/40</u> and <u>B26F 1/44</u> take precedence) }
B26F 1/386	• • {Draw punches i.e. punch and die assembled on opposite sides of a workpiece via a connecting member passing through an aperture in the workpiece }
B26F 1/3866	{specially adapted for rubber }
B26F 1/40	using a press, e.g. of the ram type (presses in general <u>B30B</u>)
B26F 1/405	{Travelling head presses }
B26F 1/42	having a pressure roller
B26F 1/44	Cutters therefor Dies therefor
B26F 1/46	Loose press knives
B26F 3/00	Severing by means other than cutting Apparatus therefor (severing by grinding B24B 27/06)
B26F 3/002	. {Precutting and tensioning or breaking }
B26F 3/004	. {by means of a fluid jet (methods for use of abrasive blasting for cutting $\underline{B24C\ 1/045}$; guns for abrasive fluid jets $\underline{B24C\ 5/02}$; perforating by non-mechanical means, e.g. by fluid jet $\underline{B26F\ 1/26}$) }
B26F 3/008	{Energy dissipating devices therefor, e.g. catchers; Supporting beds therefor (cutting beds in general <u>B26D 7/20</u>) }
B26F 3/02	. Tearing
B26F 3/04	. Severing by squeezing (B26F 3/08 takes precedence)
B26F 3/06	. Severing by using heat
B26F 3/08	with heated members
B26F 3/10	with heated rollers or discs
B26F 3/12	with heated wires
B26F 3/16	by radiation (by laser beam B23K 26/00)
Guide heading:	
B26F 2001/00	Perforating Punching Cutting-out Stamping-out Apparatus therefor (subhiecting the grinding tools or the abrading medium to vibration

Apparatus therefor (subbjecting the grinding tools or the abrading medium to vibration, e.g. grinding with ultrasonic frequency <u>B24B 1/04</u>, perforating by sand-blasting <u>B24C</u>; {e.g. abrasive blasting used for cutting <u>B24C 1/045</u>}; punching cards or tapes for

B26F 2001/32 . Hand-held perforating or punching apparatus, e.g. awls

statistical and record purposes G06K 1/00)

B26F 2001/36	Punching or perforating pliers	
B26F 2001/365	hand held pliers with handles	
	'	
B26F 2001/38	. Cutting-out Stamping-out	
B26F 2001/3873	advancing the material stepwise onto the work surface of the cutting machine	
B26F 2001/388	controlling the blade orientation along the cutting path	
B26F 2001/3886	shearing by reciprocating a straight blade, e.g. nibbling	
B26F 2001/3893	cutting out by using an oscillating needle	
B26F 2001/40	using a press, e.g. of the ram type (presses in general <u>B30B</u>)	
B26F 2001/402	curvilinear cutting presses, i.e. the stroke comprising an overlay of a linear and a curved movement	
B26F 2001/407	stepwise sequential punching processes	
B26F 2001/44	Cutters therefor Dies therefor	
B26F 2001/4409	having die balancing or compensating means	
B26F 2001/4418	combining cutting and embossing operations	
B26F 2001/4427	combining cutting and forming operations	
B26F 2001/4436	Materials or surface treatments therefore	
B26F 2001/4445	Matrices, female dies, creasing tools	
B26F 2001/4454	Die heads carrying several moveable tools	
B26F 2001/4463	Methods and devices for rule setting, fixation, preparing cutting dies	
B26F 2001/4472	Cutting edge section features	
B26F 2001/4481	having special lateral or edge outlines or special surface shapes, e.g. apertures	
B26F 2001/449	for shearing, e.g. with adjoining or abutting edges	
B26F 2003/00	Severing by means other than cutting Apparatus therefor (severing by grinding B24B 27/06)	
B26F 2003/004	• {by means of a fluid jet (methods for use of abrasive blasting for cutting <u>B24C 1/045</u> ; guns for abrasive fluid jets <u>B24C 5/02</u> ; perforating by non-mechanical means, e.g. by fluid jet <u>B26F 1/26</u>) }	
B26F 2003/006	having a shutter or water jet deflector	
Guide heading:		
B26F 2210/00	Perforating, punching, cutting-out, stamping-out, severing by means other than cutting of specific products	
B26F 2210/02	. of stacked sheets	
B26F 2210/04	. Making plastic pilferproof screw caps by cutting a tamper ring	
B26F 2210/06	. Trimming plastic mouldings	

B26F 2210/08	. of ceramic green sheets, printed circuit boards and the like
B26F 2210/11	. of plastic containers before compressing
B26F 2210/12	. of fabrics
B26F 2210/14	the cutting machine comprising a rotary knife
B26F 2210/16	the cutting machine comprising a cutting die